

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

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2004-11-22

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NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

17.11.2004

Applicant's or agent's file reference
W 5874-163 *Ek*

IMPORTANT NOTIFICATION

International application No.
PCT/EP 03/09208

International filing date (day/month/year)
20.08.2003

Priority date (day/month/year)
11.10.2002

Applicant

TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



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FRIST





PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference W 5874-163	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/EP 03/09208	International filing date (<i>day/month/year</i>) 20.08.2003	Priority date (<i>day/month/year</i>) 11.10.2002
International Patent Classification (IPC) or both national classification and IPC H04B17/00		
Applicant TELEFONAKTIEBOLAGET LM ERICSSON (PUBL)		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 26.04.2004	Date of completion of this report 17.11.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840	Authorized Officer Farese, L Telephone No. +49 30 25901-467 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/09208

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-11 as originally filed

Claims, Numbers

1-15 as originally filed

Drawings, Sheets

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/09208

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-7, 9-14
	No: Claims	1, 8, 15
Inventive step (IS)	Yes: Claims	2, 9
	No: Claims	1, 3-8, 10-15
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. The following document (D) is referred to in this communication:

D0: WO 02 41530 A (SATO MASANORI ;SONY CORP (JP); ITOH KATSUTOSHI (JP)) 23 May 2002 (2002-05-23)

2. The Examining Division acknowledges the fact that the document:

D1: EP 1 249 951 A (SONY CORPORATION) 16 October 2002 (2002-10-16)

- has been published on the 16.10.2002;
- is entitled to the same priority as D0.

Therefore, the Examining Division assumes that the content of D1 corresponds to the content of document D0.

The present communication will refer therefore to D1.

3. The application does not meet the requirements of Article 6 PCT, because claims 1, 8, 15 are not clear.

- 3.1 The terms "verifying", "verification" used in claims 1, 8, 15 are vague and unclear and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claims unclear.

In detail, such terms have not a well established meaning in the field.

In addition this term corresponds to an entire mathematical process which is considered essential to the definition of the invention.

This unclarity is therefore generating collision problems with document D1 as stated in the following points 4. and 5.

- 3.2 An objection is raised according to the Guidelines C-III, 6.5, when considering claim 8.

In detail, the terms "[characterised in that...] the SIR estimation depends on said output of said TPC verification unit", are considered to be a functional feature.

In accordance with the cited paragraph of the Guidelines, a functional feature is acceptable only when the skilled man in the art would appreciate that other means like the one disclosed in the application could be used for the same function. This is not the case with the present application which discloses only two precise dependencies of the SIR from the processing of the TPC.

- 3.3 The terms "said pilot and data symbols" used in claim 9 are imprecise and leave the reader in doubt as to the meaning of the technical features to which they refer, thereby rendering the definition of the subject-matter of said claim unclear.

In detail, such signals have not been introduced previously.

- 3.4 Claim 15 is unclear. At present, a device for performing a method is claimed, which is allowable (T0410/96), but the characterizing portion is not containing technical device means.

In addition, the "characterized by" construction collides with the characterizing portion of the method 1 to which claim 15 refers.

4. The present application does not meet the requirements of Article 33(2) PCT, because the subject-matter of claims 1, 8, 15 is not new.

- 4.1 Using the terms of present claim 8 but taking references from D1 (see D1, fig. 9, 14, para [0215], the references in parentheses applying to this document), this document discloses:

a device for estimating a signal to interference ratio, SIR, (**abstract**) of a signal transmitted from a first unit to a remotely located second unit (**fig. 9**) in a Wideband Code Division Multiple Access, WCDMA wireless communication system, said signal being transmitted through an air interface (**fig. 9**) comprising
means for Transmit Power Control verification (**84**) having an output signal,
means for SIR estimation
wherein the SIR estimation depends on said output of said TPC verification

unit (para[0215]).

The subject-matter of independent claim 8 is therefore not new (Article 33(2) PCT).

4.2 The above analysis equally applies to claims 1 and 15 which are related to the same subject-matter as claim 1 under a different category.

5. The remaining dependent claims 4-7, 11-14 do not contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of Article 33(3) PCT with respect to inventive step, since these claims concern features known from common general knowledge in the relevant field or simple circuital design.

Concerning claims 3 and 10, more in detail, it is considered that as soon as the reverted space-time process has taken place at the terminal, the recomposed signal can be subjected to the TPC/SIR processing, i.e. the two processes have not common interactions and can run separately.

6. The combination of the features of dependent claims 2, 9 is neither known from, nor rendered obvious by, the available prior art.